

Exemption No. 7465A

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

Pacific Island Aviation, Inc. (PIVA)

for an exemption from §§ 25.857(c) and
121.314(c) of Title 14, Code of Federal
Regulations

**Regulatory Docket No.
FAA-2001-8933**

GRANT OF EXEMPTION

By letter of June 13, 2001, Mr. Aaron A. Goerlich, Counsel for Pacific Island Aviation, Inc. (PIVA), Law Offices of Boros & Garofalo, P.C., Suite 550, 1201 Connecticut Avenue, N.W., Washington, D.C. 20036-2645, petitioned the Federal Aviation Administration for an amendment to Exemption No. 7465, issued to PIVA on March 15, 2001. That grant of exemption from certain requirements of § 121.314(c) allowed PIVA to operate, until June 20, 2001, three SD3-60 airplanes beyond the cargo compartment modification deadline of March 19, 2001. The petitioner requests an extension through April 15, 2002, or through the 30th day after delivery to PIVA of the aircraft modification kits by the aircraft manufacturer, Short Brothers plc, whichever is sooner.

The petitioner requests relief from the following regulations:

Section 121.314(c) requires that after March 19, 2001, each Class D compartment, regardless of volume, must meet the standards of §§ 25.857(c) and 25.858 of this Chapter for a Class C compartment unless the operation is an all-cargo operation in which case each Class D compartment may meet the standards in § 25.857(e) for a Class E compartment.

ANM-01-468-E

Section 25.857(c) requires that a Class C cargo or baggage compartment have:

- (1) A separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station,
- (2) An approved built-in fire extinguishing or suppression system controllable from the cockpit,
- (3) Means to exclude hazardous quantities of smoke, flames, or extinguishing agent, from any compartment occupied by the crew or passengers, and
- (4) Means to control ventilation and drafts within the compartment so that the extinguishing agent used can control any fire that may start within the compartment.

Section 25.858 requires:

- (a) The detection system must provide a visual indication to the flight crew within one minute after the start of a fire,
- (b) The system must be capable of detecting a fire at a temperature significantly below that at which the structural integrity of the airplane is substantially decreased,
- (c) There must be means to allow the crew to check in flight, the functioning of each fire detector circuit, and
- (d) The effectiveness of the detection system must be shown for all approved operating configurations and conditions.

The petitioner's supportive information is as follows:

- “1. The FAA’s findings underlying Exemption No. 7465 remain valid in all respects, with the exception of PIVA’s ability to meet a deadline of June 20, 2001, for completion of the aircraft modifications at issue.”
- “2. The aircraft manufacturer, Short Brothers (Shorts), has made every effort to complete design of the necessary modifications and, in fact, has recently submitted its modification application and relevant certification plans/rationale to the British Civil Aviation Authority (CAA) for review and approval. However, given the limited staff resources available to the CAA, and as more fully explained in Shorts’s letter [dated June 12, 2001] to Mr. Todd Thompson of [the FAA, ANM-116] (copy appended as Attachment A) formal CAA approval is targeted to occur by the end of August. In its letter, Shorts has further advised the FAA that this is expected to allow a target completion of late October for detail

design, and modification kit delivery to PIVA by the end of March 2002. In the same letter Shorts has assured the FAA that Shorts ‘will make best efforts to improve on’ the above schedule.

“The substantial engineering and design progress achieved by Shorts, while obviously important, is not the sole new development. PIVA’s pre-existing commitment to purchase modification kits for its three SD3-60 aircraft has been formalized. Appended as Attachment B is a purchase order and response dated June 12, 2001, whereby Shorts has acknowledged and agreed to PIVA’s written order. Pricing of the modification kits necessarily remains to be finalized (pending Shorts’ design detail finalization and selection of components), however PIVA and Shorts have committed respectively to purchase and deliver the three modification kits required by PIVA.

- “3. PIVA acknowledges the FAA’s desire to minimize further postponement of the original modification deadline of March 19, 2001. While PIVA would certainly have preferred to meet that deadline, and while PIVA was hopeful an extension of Exemption No. 7465 would be unnecessary, the carrier is necessarily dependent upon the aircraft manufacturer, Shorts, for design and certification of the modification, and for the modification kits themselves.

“In this respect, it should be noted that there are only four SD3 aircraft worldwide (three operated by PIVA, one by Freedom Air) that, by virtue of their passenger configuration and U.S. registry, are subject to the requirements at issue. By contrast, at the time the FAA adopted the Final Rule mandating modification of Class D cargo compartments to meet Class C standards, there were a number of operators of SD3 aircraft in passenger configuration in the United States and its protectorates. Thus the market for SD3 modification kits has shrunk considerably.

“The FAA foresaw this type of situation in its Final Rule discussion of the Lockheed L-188 Electra aircraft. Noting the small number of such aircraft in passenger configuration (coincidentally, four), the FAA suggested the filing of a petition for exemption as a solution to the problem. *See* 63 Fed. Reg. 8032, 8041 (February 17, 1998).

“Despite timing complications stemming from the small SD3 market, PIVA is fully committed to the acquisition and installation of modification kits as soon as Shorts can make them available. In cooperation with Shorts, PIVA will provide whatever assistance it reasonably can to help the manufacturer continue to expedite the process.

“It should be noted additionally that the existing cargo compartments on PIVA’s SD3-60 aircraft are substantially compliant with Class C standards, lacking only the means for automated introduction of fire suppressant (the existing design incorporates automated fire-detection equipment, while fire suppressant can be

introduced in-flight through manual means). The FAA has taken appropriate note of these design features in Exemption No. 7465; note additionally that the longest stage length operated by PIVA is the 40-minute Guam-Tinian sector, on which Rota (also served by PIVA) is at the approximate midpoint (see copy of PIVA route map appended as Attachment C). Thus, in day-to-day operations, PIVA flights do not operate more than 10-15 minutes from a suitable emergency landing facility.

“4. PIVA acknowledges that in light of the longer-term exemption requested by this petition, the FAA may find it necessary to condition the exemption in reasonable respects. PIVA would offer the following conditions for the FAA’s consideration:

“(a) As noted at the outset of this petition, the duration of the exemption would not extend beyond the 30th day after delivery to PIVA of the modification kits furnished by Shorts. While an ‘outside’ date of April 30, 2002, has been proposed based upon the timetable furnished to the FAA by Shorts (see Attachment A), PIVA will assure that modifications to all three aircraft are completed within 30 days after the kits are delivered. PIVA submits that a 30-day window for completion of actual fleet installation is reasonable and appropriate.

“(b) Beginning July 16, 2001, and on or about the 15th of each month thereafter during the pendency of the amended exemption, PIVA will submit a progress report to your office describing developments during the preceding 30 days. This will enable the FAA to monitor the status of the matter on a regular basis. While PIVA will necessarily have to rely on Shorts to furnish much of the information contained in the monthly reports, PIVA is confident that Shorts will cooperate fully.

“(c) As noted above, the cargo compartments on PIVA’s three aircraft are substantially compliant with Class C standards in their existing configuration. Nevertheless, in an effort to minimize any potential for combustion, during the pendency of the amended exemption PIVA will post conspicuous notices at each of its check-in counters providing as follows:

Recent changes to the USA’s Federal Aviation Regulations do not allow aerosol cans to be transported on this aircraft in the baggage compartments. Passengers with aerosol cans in their check-in baggage must remove them and place them into carry-on luggage.

“The above notice would be printed in English, Japanese, Korean, and Mandarin-languages spoken by virtually all of PIVA’s passengers. Check-in agents, upon determining the language of each passenger, would direct the passenger’s attention to the appropriate portion of the notice and ask the passenger if he or she needs to remove items from checked baggage.

“5. Finally, PIVA submits that good cause exists for waiver of any advance-filing or *Federal Register* publication requirement that may be considered applicable to this petition to amend an exemption. A summary of PIVA’s original petition was published in the *Federal Register* on March 2, 2001. No comments were received. Given that (i) PIVA requests only an extension of the existing exemption as opposed to a substantive change, (ii) the usual 120-day advance filing requirement is by definition inapplicable in the context of renewing a 90-day exemption, (iii) a clear necessity for extended relief became apparent only last month (see May 31 PIVA-to-FAA letter appended as Attachment D), and (iv) there was no public comment in response to PIVA’s original petition, PIVA submits there is good cause for the FAA to dispense with any publication and to act favorably on this petition prior to June 20, 2001.”

The FAA has honored the petitioner’s good cause request, and has waived the requirement to publish a summary of the petition in the Federal Register for public comment.

The Federal Aviation Administration's analysis/summary is as follows:

In drafting the previous exemption, the FAA assumed that the petitioner would work diligently with the manufacturer to secure and install the parts that are needed for compliance. Though we thought that the original 90-day extension was reasonable, we now recognize that due to apparent difficulties encountered by the petitioner compliance cannot be met under the terms of Exemption No. 7465 and a further extension is now being sought. We do agree with the petitioner that their justification with respect to “Essential Air Service” is valid. We note that the British CAA’s approval of the modification has been requested by Shorts, but it is not reassuring to know that the commitment to produce/supply modification kits by March 2002 is non-binding. However, we recognize that a purchase order by PIVA has been formalized.

While we agree that the SD3-60 airplanes’ cargo compartments meet the smoke detection and indication requirements and have a manually operated fire suppression system, we do not agree that the compartments are substantially compliant with Class C standards. The difference between a fire-extinguishing agent being discharged on command from the cockpit vs. manually can be significant in terms of elapsed time from detection of fire to discharge of suppression agent and efficiency of the suppression. This is especially true for fires fueled by hazardous materials, which can propagate very quickly. We note that an accident caused by a chemical oxygen generator fire led to the adoption of the regulation from which the petitioner is seeking this exemption (Amendments 25-93 and 121-269 requiring Class D to Class C cargo compartment conversions). Note that we intend that both forward and aft cargo compartments will be converted to Class C cargo compartments by the expiration of this time extension.

To extend this exemption, we have determined that it is necessary to add additional conditions relative to the previous exemption to minimize the possibility of fire in the cargo compartment, and to minimize its impact should a fire occur, in order to provide an acceptable level of safety. The petitioner has proposed some of these conditions.

We note that PIVA's contention that the regulations do not allow aerosol cans to be transported in "baggage compartments" is inaccurate. We are not aware of any regulations banning transport of aerosol cans in the baggage compartments. Further, while aerosol cans are a concern, the broader safety concern relates to all hazardous materials in any type of container. We also consider PIVA's proposed posting of a conspicuous notice at each of its check-in counters to be insufficient. Just posting a sign or drawing the attention of a passenger to this issue is not an effective deterrent. For the purpose of this exemption and in order to minimize the hazard, no hazardous materials will be allowed in the cargo compartments on passenger carrying flights. As a result, an effective Checked Baggage Hazmat Screening Process must be developed and implemented.

In order to increase the likelihood of survival in the event of a cargo compartment fire, we are placing a time-to-safe-landing limit of 30 minutes on all flights. In addition, two fire extinguishing bottles must be located in the passenger compartment as close as possible to the rear cargo compartment (the larger of the two cargo compartments) to provide sufficient extinguishing agent should a fire occur in that compartment.

The petitioner's proposed submittal of a monthly progress report is acceptable however the report needs to be in sufficient detail for the FAA to determine development status.

This amendment refers to the same airplanes identified in the section "Description of Each Aircraft to be Covered" in Exemption No. 7465.

In consideration of the foregoing, I find that a grant of exemption is in the public interest and will not adversely affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, the petition of Pacific Island Aviation, Inc. (PIVA) for an amendment to Exemption 7465 from the provisions of § 121.314(c) is hereby granted. This exemption is granted to the extent necessary to allow PIVA's three Model SD3-60 airplanes to operate through April 15, 2002, or through the 30th day after delivery to PIVA of the aircraft modification kits by the aircraft manufacturer, whichever is sooner, and is subject to the following provisions:

Within 30 days of the grant of this exemption:

1. Petitioner must develop and implement a Checked Baggage Hazmat Screening Process, to minimize the possibility that hazardous materials will be checked as baggage, that is acceptable to PIVA's Principal Operations Inspector.
2. Two Fire Extinguishing Bottles will be carried in the passenger compartment as close as possible to the rear cargo compartment (as well as a third one in the flight deck compartment).
3. A Flight Time Limit to a suitable landing site (30 minutes) will be applicable.
4. No hazardous material shall be carried in the cargo compartments on passenger flights.
5. A Monthly Progress Report in sufficient detail must be submitted to this office, as well as to the PIVA Principal Operations Inspector.

All other provisions of Exemption 7465, together with associated conditions and limitations, remain the same and are applicable to this amendment. This amendment is part of, and shall be attached to, Exemption 7465.

Issued in Renton, Washington, on June 18, 2001.

/s/ K. C. Yanamura
K. C. Yanamura
Acting Manager
Transport Airplane Directorate
Aircraft Certification Service, ANM-100